Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of

Communications Assistance For Law Enforcement Act	))	CC Docket No. 97-213

COMMENTS OF BELL ATLANTIC MOBILE, INC.

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Bell Atlantic Mobile, Inc. (BAM),[1] submits these initial comments on the Commission's Further Notice of Proposed Rulemaking in this proceeding.[2] The Further NPRM seeks input on whether to modify the industry-developed technical requirements for wireline, cellular and PCS carriers to comply with the assistance capability requirements set forth in the Communications Assistance for Law Enforcement Act of 1994 (CALEA).[3] BAM urges the Commission to reject the FBI-proposed punchlist in its entirety, and to take the additional actions outlined below.

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1 BAM, one of the nation's largest wireless carriers, provides cellular telephone service in nineteen states and the District of Columbia. BAM's technical personnel have actively participated in the industry's capability standards-setting process through participation in the TIA Subcommittee TR45.2.

2 Communications Assistance for Law Enforcement Act, CC Docket No. 97-213, Further Notice of Proposed Rulemaking ("Further NPRM"), FCC 98-282, released November 5, 1998.

3 Pub. L. No. 103-414, 108 Stat. 4279 (1994).

SUMMARY

1. The Commission should reject each of the punchlist items proposed by the FBI. First, the FBI has not met its burden to prove that J-STD-025, the interim industry standard, is "deficient," as it must under CALEA Section 107(b) before additional capabilities can be ordered. Second, requiring carriers to implement the punchlist items would unlawfully expand law enforcement's interception capabilities, thus violating CALEA's mandate that those capabilities merely be preserved. Adding any punchlist items would disrupt the balance Congress struck between competing privacy and law enforcement interests.

Third, neither the FBI nor the Further NPRM show why these items are reasonably achievable and cost effective, but instead assert that carriers must prove that they are not. Given that carriers are dependent on equipment vendors, who have not to date supplied price data, the Commission's approach places carriers in an impossible situation that constitutes arbitrary and capricious rulemaking.

Fourth, a cost assessment that looks only at the costs of retrofitting existing wireless infrastructure, without including the adverse impact on future wireless technologies and the Commission's public interest goals for wireless, would be inadequate. It would be equally defective unless it evaluates the particular costs and burdens the punchlist items would impose on wireless carriers, given the different infrastructure deployed in wireless networks.

2. Packet-mode transmissions should not be included in the initial capability requirements.

3. The June 2000 date should be deferred if punchlist items are required. In the event the Commission were to require any of the punchlist items, it should defer the June 2000 compliance deadline to a date that will allow efficient deployment of a single, comprehensive capability solution. This will minimize the wasted expense to carriers and the public that would result from forcing carriers to build to the interim standard, but then rebuild to include punchlist items at a later date once vendors are in a position to supply punchlist-related upgrades.

4. The Commission should begin a proceeding under CALEA Section 109 to determine whether capability compliance is reasonably achievable with respect to equipment installed or deployed after January 1, 1995.

I. EACH OF THE PUNCHLIST ITEMS SHOULD BE REJECTED.

The FBI's deficiency petition demands that the Commission add nine discrete capability requirements to the interim standard. BAM strongly opposes the addition of any punchlist items as unlawful on multiple grounds.

A. CALEA's Principal Reliance On Industry Standards Should Be Followed. Congress intended capability standards which meet Section 107(b)'s requirements to be set principally through industry efforts. "The legislation gives industry, in consultation with law enforcement and subject to review by the FCC, a

key role in developing the technical requirements and standards that will allow implementation of the requirements."[4] The Commission recognizes that "The Act envisions that an industry association or a standards-setting organization would set applicable standards." Further NPRM at ¶ 7. Its narrow role under Section 107(b) is only to "review" the interim standard to determine if it is deficient.

In conducting that review, the Commission must be guided by CALEA's legislative history, which requires that it take a cautious view of what Section 107(b) requires because of the significant constitutional and privacy interests at stake: "The Committee urges against overbroad interpretation of the requirements. . . . The Committee expects industry, law enforcement and the FCC to narrowly interpret the requirements."[5] The Commission must also be guided by its own precedent, which acknowledges the importance of relying on the expertise and resources of industry standards bodies, rather than its own limited resources, to develop technical standards.[6] Requiring compelling evidence to change an industry

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4 H. Rep. No. 103-827, 103d Cong., 2d Sess. (1994), at 22-23.

5 Id. at 22-23.

6 See, e.g., Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN Docket No. 90-314, Second Report and Order, 8 FCC Rcd 7700 (1994) (finding that, while interoperability among PCS systems was in the public interest, Commission would rely on industry standards bodies to adopt interoperability standards rather than impose its own requirements); Procedure for Measuring Electromagnetic Emissions from Intentional and Unintentional Radiators, GEN Docket No. 89-116, 8 FCC Rcd 4236 (1993) (adopting as new rules industry-developed technical standards for measuring radio emissions from equipment).

standard is particularly appropriate here, where the Commission has no prior experience in establishing technical standards related to electronic interception.[7]

B. The FBI Has Not Met its Burden to Prove that the Interim Standard is Deficient. While Section 107(b) provides a procedure for adding to the interim standard, that procedure places the burden squarely on a party who believes the industry standard is deficient to prove why that is the case. The FBI has not met that burden. Its deficiency petition is long on arguing why it wants to have certain capabilities, but short on why the interim standard fails as a matter of law to meet the four capability requirements of Section 107(b).

The Commission acknowledges, "CALEA does not specify how these four assistance capability requirements are to be met," and notes the "flexibility" that carriers have in determining how to comply. Further NPRM at ¶¶ 6-7. The FBI attempts to seize on these general requirements to demand more requirements. To the contrary, the generality of Section 107(b) makes it clear that there are multiple ways to comply with that provision. The mere fact that the FBI is unhappy with

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[7] Cf. National Technology Transfer and Amendment Act of 1995, Pub. L. 104-113 (NTTAA), Section 12(d), which states, "all Federal agencies and departments shall use technical standard that are developed or adopted by voluntary consensus standards bodies . ..." Under NTTAA, an agency can adopt standards that are not developed by standards bodies only if compliance "is inconsistent with applicable law or otherwise impractical," and if the agency transmits an explanation of its action to the Office of Management and Budget. NTTAA evidences a clear national policy in favor of using non-governmental bodies for standards that are incorporated into agency rules.

the course followed by the interim standard does not prove that the standard is unlawful. For this reason, the Commission does not have the requisite record basis to find the interim standard is legally deficient.

C. The Punchlist Items Unlawfully Seek to Expand Interception Capabilities. CALEA does not permit the adoption of standards that would increase law enforcement's access to private communications. CALEA's express purpose is to ensure that advances in telecommunications do not interfere with or degrade existing interception capabilities, but the law is equally clear that capabilities should not be expanded.[8] All of the punchlist items violate this critical precept because they would add to the wide scope of intercept authority that law enforcement already enjoys, and force carriers to install features that are not currently in place.

To take one example, where a conference call is established through the subject's facilities and equipment, existing technologies generally do not continue the connection after the subject terminates his or her connection to the call, yet the first punchlist item would make that capability a requirement that all carriers must offer. Adding the punchlist items would disrupt the careful balance Congress drew between competing privacy and law enforcement interests, and tilt it unlawfully in

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8 E.g., H. Rep. No. 103-827, at 22-23: "The FBI Director testified that the legislation was intended to preserve the status quo, that what was intended to provide law enforcement no more and no less access to information than it had in the past."

favor of law enforcement by granting unprecedented government access to private communications.

D. The Further NPRM Incorrectly Places the Burden on Carriers to Prove that their Costs Preclude Addition of Punchlist Items. The record has already pointed to the significant costs that compliance with the interim standard will entail, and the FBI concedes that the punchlist items will add to those costs. The Further NPRM asks for specific cost data on the punchlist items, and indicates that it is the carriers' burden to establish that the costs for each punchlist militate against adding it to the interim standard.

The Commission's approach to costs is inconsistent with CALEA. That law places the burden on the party asserting a deficiency to prove that the interim standard is deficient unless new capability requirements are added. It is thus the FBI that must show that all of the Section 107(b) requirements are met for each punchlist item being sought, including evidence that a proposed item is reasonably achievable and cost effective. The Further NPRM, however, improperly shifts this burden onto carriers by requesting that they establish that the costs of compliance are not reasonably achievable or cost effective.

Placing the onus of proof on carriers is particularly improper because carriers are in no better position to ascertain the costs than is the FBI or the Commission itself through inquiry to vendors. Indeed BAM understands that at least some vendors of potential capability solutions have shared detailed cost data with the

Bureau. BAM and other carriers cannot manufacture their own solution, but must purchase compliant equipment and features from vendors. They are dependent on vendors to provide prices. However, BAM has been informed by one of its principal vendors that no pricing estimates for punchlist items can or will be supplied to BAM at this time. A second principal vendor supplied limited and tentative information for only some punchlist items. Despite repeated requests, BAM has so far not been able to secure current or complete pricing data, in part because vendors state that they have not themselves determined how to meet punchlist capabilities.

The Further NPRM places BAM in an impossible "Catch-22" situation, by threatening to impose punchlist requirements unless BAM produces detailed cost information – even though it is BAM's vendors who will principally determine what BAM's costs will be by setting prices for punchlist equipment, and those vendors will not or cannot currently inform BAM what they will charge. Imposing punchlist requirements in this situation would be arbitrary and capricious. Unless and until equipment vendors provide detailed punchlist pricing data to carriers, so that carriers can compute their expected full costs of deployment by adding vendors' prices to their own internal costs, the Commission cannot find that all of the elements of Section 107(b) are met.

Should manufacturers supply pricing data to the Commission in their initial comments, BAM will, in its reply comments, use that cost data to develop cost

estimates for the deployment of assistance capability requirements in its cellular network.

E. Deploying Punchlist Items Will Be Particularly Difficult for Wireless Carriers and May Impair Future Technologies. It is also essential that the Commission separately evaluate the impact of the FBI's demands on cellular and PCS systems. There are material differences between industry segments in the solution needed and developed to provide CALEA capabilities. Both the interim standard and the punchlist items will be particularly difficult for BAM and other wireless carriers because of the ways in which their networks are configured. The differences between landline and wireless infrastructures must be factored in because they have a direct bearing on the feasibility and costs of CALEA compliance.

For example, in most of BAM's cellular network, there are three separate types of platforms that must be upgraded to become CALEA-compliant and, if the FBI's petition is granted, to include punchlist items: a Lucent 5 Electronic Switching System (5ESS), a separate Executive Controlled Processor Complex (ECP), and a separate Home Location Register (HLR), the component that houses subscriber databases. There are more than 50 such platforms throughout BAM's network. In the landline environment, by contrast, a single platform, the 5ESS, encompasses the functions of the ECP and HLR. For this reason, BAM will need to purchase, test and deploy throughout most of its network not one but three distinct

types of platforms. Moreover, there will be significant costs to deploy the additional new equipment required to provide law enforcement with the separate call delivery function. These requirements make wireless capability deployment particularly complex and costly, and will demand extensive outlays of personnel time and resources above and beyond the actual acquisition costs for the capability features.

The problem is exacerbated by the rapid pace at which wireless carriers are deploying new technologies to meet independent Commission requirements and also to meet the interests of their customers in relying on wireless for their communications needs. The Commission must not look only at the cost of retrofitting current infrastructure to provide the FBI's desired capabilities, but also at the adverse impact of requiring those capabilities on its own public interest policies for wireless.

For example, the Commission has required wireless carriers to provide hearing-impaired and speech-impaired subscribers with TTY-based access to digital service,[9] and to meet that requirement, BAM, other wireless carriers and vendors are developing a solution that would rely on providing TTY-based access to a digital data network. If any punchlist items are eventually added to the separate CALEA capability requirement, this data network will be more expensive and difficult to build and deployment may require more time.

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9 Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, 11 FCC Rcd 18676 (1996), on reconsideration, 12 FCC Rcd 22665 (1997).

The Commission has also noted the public interest benefits in the deployment of advanced features that will encourage subscribers to rely more on wireless technologies for their communications. BAM is, for example, working with vendors on several new conference calling features. Were those new features forced to include punchlist capabilities with the attendant higher costs and complexity, their deployment, and the benefits they bring to customers, would likely be delayed and impaired. A capability assessment that looks narrowly at the costs of retrofitting existing wireless infrastructure, without factoring in the adverse impact of the costs on future deployment of new technologies, is insufficient.

F. Dialed Digit Extraction Is Infeasible. Imposing this additional call-processing requirement would require a major change in BAM's wireless network architecture because of the way in which wireless calls are currently processed. Dialed digit extraction relies on the use of tone detectors to extract and provide the information sought. Landline switches extract the dialed digits during normal call processing progression within the existing architecture. BAM's wireless switches, in contrast, do not have tone detectors because mobile dialing information is processed on the control channels as data rather than tones. Before dialed digits can be extracted, tone detectors would have to be installed in each switch or in an outboard device that content channels would be routed to. A large number of detectors would be needed, which are not required today, and call processing would need to be changed to accommodate the continuous connection with the detectors. A

content channel would have to be used, even for a pen register order, and a tone detector connected to the circuit to be able to hear the digits -- all for a capability that has never been provided to law enforcement before. For these reasons and others in the record (Further NPRM at ¶¶ 124-26), dialed digit extraction cannot be lawfully imposed.

II. PACKET-MODE COMMUNICATIONS SHOULD BE EXCLUDED FROM THE FINAL CAPABILITY RULE.

The Further NPRM (at ¶ 64) concludes that "it is premature to impose any particular technical requirements for packet-mode telecommunications at this time." BAM agrees, and urges the Commission to declare as part of any capability rule that the rule does not apply to packet transmissions. BAM, for example, has deployed a cellular digital packet data (CDPD) network that uses a separate set of base stations and switches from those used for conventional circuit-switched transmissions. The cost of retrofitting CDPD infrastructure would be over and above the cost of retrofitting existing circuit-switched infrastructure. Aside from the additional costs, the record clearly shows the many intractable legal problems that arise in attempting to grant law enforcement access to packet communications. For example, the Further NPRM (at ¶ 63) correctly observes that, because of the nature of packet transmission technology, there is as of today no feasible way to avoid transmitting call content information with call-identifying information, even when only the latter may lawfully be intercepted. This problem raises serious

privacy concerns that alone warrant deferring the extension of capability requirements to packet communications.

III. ADDITION OF PUNCHLIST ITEMS WILL REQUIRE DEFERRAL OF THE JUNE 2000 COMPLIANCE DATE.

The Commission states that carriers must comply with the interim standard as a "safe harbor" or must have deployed another solution that meets Section 103's capability requirements by June 30, 2000. But it also notes that "the additional 'non-core' technical requirements we propose to be adopted in this proceeding may require additional time for manufacturers to design and develop these capabilities and for telecommunications carriers to incorporate them into their networks," and seeks comment on "establishing another deadline or an implementation schedule for telecommunications carriers to comply with any new technical requirements we ultimately adopt in the instant proceeding." Further NPRM at ¶¶ 46-47.

BAM disagrees with this bifurcated approach. The proposal presumes (without supporting facts) that the punchlist items are "outside" of the "core" interim standards, and that these "non-core" requirements can simply be added on at a later date. The record already amassed on the FBI's deficiency petition clearly shows, however, that the FBI's proposals are far from "add-ons"; rather, they affect the fundamental design and configuration of carriers' design for compliance. They cannot simply be attached to capabilities already deployed. To the contrary, were carriers forced to build out to the interim standard by June 2000, and then later

forced to install separate punchlist items, there would be considerable wasted effort and wasted dollars because of the need to upgrade and retrofit the very equipment that had just been installed to meet the interim standard.

This is a serious cost issue that will increase CALEA's financial impact not only on carriers, but also on the Government, because carriers will apply for federal reimbursement of punchlist costs pursuant to the cost recovery provisions of the law. Requiring punchlist capabilities will also undermine the validity of the Commission's assumptions underlying the current June 2000 deadline. The feasibility of that deadline is already dubious given wireless carriers' obligations to deploy E911 capability, number portability capability, and solve multiple "Y2K" – related problems. If any punchlist items are imposed, the Commission should not impose a two-step capability deployment schedule. The right course would be to defer the June 2000 date for a sufficient time to allow carriers to obtain the necessary equipment to comply with any new punchlist requirements simultaneously with the interim standard.

IV. THE JANUARY 1995 GRANDFATHER DATE SHOULD BE ADDRESSED NOW.

CALEA Section 109 provides that the Commission shall determine whether "compliance with the assistance capability requirements of section 103 is reasonably achievable with respect to any equipment, facility or service installed or deployed after January 1, 1995." If compliance for equipment installed after that date is not

reasonably achievable, carriers are not required to install such equipment unless they are reimbursed for the costs of compliance. In December 1997, BAM and other parties urged that the Commission commence a proceeding under Section 109(b) to decide whether carriers should be required to bear the costs of retrofitting equipment installed after January 1, 1995.[10] Even though more than a year has passed since that time, the Commission has taken no action. It should do so now.

When Congress enacted CALEA in 1994, it set the January 1, 1995 date on the premise that capability standards would soon be adopted. Carriers installing equipment in 1995 and in later years could minimize the costs of making it CALEA-compliant by designing it to meet capability standards. That assumption would have proven correct if carriers had in fact been able to purchase CALEA-compliant equipment as they upgraded and expanded their networks.

Instead, however, no capability standard was adopted until the TIA published J-STD-025 in December 1997, more than three years after the law's passage. During those three years, Congress and the Commission, through spectrum auctions, market-opening initiatives in the 1996 Act, and other actions, encouraged the telecommunications industry to make enormous investments in their networks — and the industry did just what Congress and the Commission

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10 Communications Assistance for Law Enforcement Act, CC Docket No. 97-213, Notice of Proposed Rulemaking, FCC 97-356, e.g., Comments of Bell Atlantic Mobile, Inc., filed December 12, 1998.

wanted. Hundreds of new telecommunications carriers have constructed new PCS systems across the nation or have entered the local exchange market as resellers and CLECs, at an aggregate investment of billions of dollars. Existing carriers have similarly been investing enormous sums to upgrade their networks to provide new services to the public. BAM, for example, has made huge investments in the infrastructure needed to deploy CDMA digital cellular technology in order to bring its customers state-of-the-art wireless services and features.

BAM and other carriers were, however, unable to buy equipment that complied with CALEA capability standards, because those standards did not exist. They now face the prospect of having to make substantial additional investments in retrofitting the networks they have just completed building or upgrading.

The January 1, 1995 date, which might have been reasonable had carriers been able to obtain CALEA-compliant equipment shortly afterward, has become an arbitrary and unreasonable albatross, which will take money that would otherwise go to efforts to compete in the telecommunications market and to further improve carriers' provision of new services and technologies to customers. This is not what Congress intended.

The Commission is empowered under Section 109 with broad authority to alleviate the adverse public policy implications for competition and consumers of requiring carriers to pay for retrofitting all equipment. Section 109 allows it to address the extent to which carriers should retrofit post-January 1, 1995 equipment

by considering a wide range of factors, including the impact of compliance costs on carriers and their customers, and also "such other factors as the Commission determines are appropriate." Taking up this critical matter now will avoid the burden the Commission will face in having to address the numerous individual Section 109 petitions which will otherwise inevitably be filed.

CONCLUSION

The Commission should reject each of the punchlist items. It should also defer consideration of the extension of CALEA's capability requirements to packet communications, postpone the June 2000 deadline for capability compliance if any punchlist items are adopted, and commence a proceeding to fulfill its responsibility to determine whether the June 1995 grandfather date is reasonably achievable.

Respectfully submitted,

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